

C1 --This application is a divisional of co-pending U.S. application Serial No. 09/378,152, filed on August 20, 1999, now U.S. Patent No. 6,246,070.--

IN THE CLAIMS:

Please amend claims 29, 30, 33-36 to read as follows:

29 (Amended). A method of fabricating an EL display device, said method comprising the steps of:

forming a gate wiring on an insulating surface;

forming a gate insulating film and an amorphous semiconductor film into a laminate sequentially without exposing them to an atmosphere on the gate wiring;

irradiating the amorphous semiconductor film with at least a light selected from the group consisting of an infrared light and an ultraviolet light to crystallize the amorphous semiconductor film into a crystalline semiconductor film and to form an oxide film at a same time;

C2 covering a first portion of the crystalline semiconductor film with a mask;

providing an impurity element into second portions of the crystalline semiconductor film through the oxide film,

wherein the first portion of the crystalline semiconductor film is a channel forming region while the second portions of the crystalline semiconductor film are source and drain regions.

30 (Amended). A method according to claim 29,

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wherein contaminants on a surface of the gate insulating film are reduced by active hydrogen or hydrogen compound before forming the amorphous semiconductor film.

33 (Amended). A method according to claim 29,  
wherein the gate insulating film, the amorphous semiconductor film and the oxide film are formed in a same chamber.

34 (Amended). A method of fabricating an EL device, said method comprising the steps of:  
forming a gate wiring on an insulating surface;  
forming a gate insulating film, an amorphous semiconductor film, and an insulating film into a laminate sequentially without exposing them to an atmosphere on the gate wiring;

irradiating the amorphous semiconductor film with at least a light selected from the group consisting of an infrared light and an ultraviolet light to crystallize the initial semiconductor film into a crystalline semiconductor film;

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covering a first portion of the crystalline semiconductor film with a mask;  
providing an impurity element into second portions of the crystalline semiconductor film through the insulating film,

wherein the first portion of the crystalline semiconductor film is a channel forming region while the second portions of the crystalline semiconductor film are source and drain regions.

35 (Amended). A method according to claim 34,

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wherein the gate insulating film, the amorphous semiconductor film, and the insulating film are formed in a same chamber.

36 (Amended). A method according to claim 34,  
wherein contaminants on a surface of the gate insulating film are reduced by active hydrogen or hydrogen compound before forming the amorphous semiconductor film.

Please add the following new claims 39-55 as follows:

--39 (New). A method according to claim 29,  
wherein the light is a laser light.

40 (New). A method according to claim 29,  
wherein the impurity is at least one selected from the group consisting of a trivalent impurity and a pentavalent impurity.

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41 (New). A method according to claim 29,  
wherein the mask comprises at least one selected from the group consisting of positive photosensitive organic material, negative photosensitive organic material, silicon oxide, silicon nitride, and silicon nitride oxide.

42 (New). A method according to claim 29,

wherein the EL display device is combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of a video camera, a digital camera, a projector, a goggle display, a navigation system for vehicles, a personal computer, and a portable information terminal.

43 (New). A method according to claim 34,

wherein the light is a laser light.

44 (New). A method according to claim 34,

wherein the impurity is at least one selected from the group consisting of a trivalent impurity and a pentavalent impurity.

45 (New). A method according to claim 34,

wherein the mask comprises at least one selected from the group consisting of positive photosensitive organic material, negative photosensitive organic material, silicon oxide, silicon nitride, and silicon nitride oxide.

46 (New). A method according to claim 34,

wherein the EL display device is combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of a video camera, a digital camera, a projector, a goggle display, a navigation system for vehicles, a personal computer, and a portable information terminal.

47 (New). A method of fabricating an EL display device, said method comprising the steps of:

forming a gate wiring on an insulating surface;

forming a gate insulating film and an amorphous semiconductor film into a laminate sequentially without exposing them to an atmosphere on the gate wiring;

irradiating the amorphous semiconductor film with at least a light selected from the group consisting of an infrared light and an ultraviolet light to crystallize the amorphous semiconductor film into a crystalline semiconductor film and to form an oxide film at a same time;

covering a first portion of the crystalline semiconductor film with a first mask;

providing an impurity element into second portions of the crystalline semiconductor film at a first concentration through the oxide film using the first mask;

providing the impurity element into third portions of the crystalline semiconductor film at a second concentration through the oxide film using a second mask,

wherein the second concentration is higher than the first concentration,

wherein the first portion of the crystalline semiconductor film is a channel forming region while the third portions of the crystalline semiconductor film are source and drain regions,

wherein fourth portions of the crystalline semiconductor film which are not provided with the impurity at the second concentration but only the first concentration are low concentration impurity regions.

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48 (New). A method according to claim 47,

wherein contaminants on a surface of the gate insulating film are reduced by active hydrogen or hydrogen compound before forming the amorphous semiconductor film.

<sup>3</sup>  
~~49~~ (New). A method according to claim ~~47~~<sup>1</sup>, further comprising a step of forming a silicon nitride film before forming the gate insulating film.

<sup>4</sup>  
~~50~~ (New). A method according to claims ~~47~~<sup>1</sup>, further comprising a step of forming a laminate film including BCB (benzocyclobutene) as a part of the gate insulating film.

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~~51~~ (New). A method according to claim ~~47~~<sup>1</sup>,  
wherein the gate insulating film, the amorphous semiconductor film and the oxide film are formed in a same chamber.

<sup>6</sup>  
~~52~~ (New). A method according to claim ~~47~~<sup>1</sup>,  
wherein the light is a laser light.

<sup>7</sup>  
~~53~~ (New). A method according to claim ~~47~~<sup>1</sup>,  
wherein the impurity is at least one selected from the group consisting of a trivalent impurity and a pentavalent impurity.

<sup>8</sup>  
54 (New). A method according to claim 29,  
wherein each of the first and second masks comprises at least one selected from the group